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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09,445,102	11/30/1999	KENJI UCHIYAMA	9319S-000112	9462

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EXAMINER

DUONG, TAI V

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 01/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/445,102

Applicant(s)

UCHIYAMA, KENJI

Examiner

TAI DUONG

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 2, 4 and 5 is/are allowed.
- 6) ☒ Claim(s) 3 and 6-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 7.

- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Figure 8 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the recited feature "external terminals form(ed) on said second side of said substrate and aligned with select(ed) ones of said plurality of terminals formed on said first side of said substrate" of claim 8. It is noted that the specification discloses only the substrate-side terminals 34 and the external-connecting terminals 25 of the target object substrate.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 and 6-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is confusing because it is inconsistent with the specification and the drawings. Claim 3, which depends on claim 1, is drawn to the embodiment of Figs. 1 and 2. Claim 1 is directed to the embodiment of Figs. 3 and 4 when comparing the recited elements "opposing-side terminals", "substrate-side terminals" with those disclosed in the specification as "external-connecting terminals 25", "substrate-side terminals 34", respectively. However, the specification

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discloses the elements 14 and 16 of the embodiment of Figs. 1 and 2 as "lands 14", "bumps 16". As apparent from Figs. 3 and 4, the specification also distinguishes between the "bumps" of the IC chip 24 and the "terminals" 34 of the compression-bond-connection substrate. Therefore, the term "terminals" is interpreted by the examiner when read in light of the specification and Figs. 3-4 as "terminals 25 and 34", not the bumps 16 nor the lands 14. Also, the terminals are commonly located at the edges of the substrate for the ease connection with another circuit board or LC substrate, as is common in the art.

Claim 6 is confusing because it is unclear whether the target object of claim 1 is one of the pair of the substrates of claim 6 or different.

Claim 8 is inconsistent with the specification and the drawings because it is unclear to which terminals of which drawings the recited "external terminals" refer.

Claim 8 is indefinite for the same reasons applied to claim 3. The remaining claims are also rejected since they depend on the indefinite claims.

Claims 3, 7, 9-12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 6 and 8 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

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Claim 1 is allowable over the prior art of record because none of the prior art discloses or suggests a compression-bond-connection substrate comprising substrate-side terminals to be conductively connected to the opposing-side terminals, backside wiring patterns formed on a reverse face of the compression-bonding-side surface wherein step compensation patterns having substantially the same thickness as that of the backside wiring patterns are formed on the reverse face in positions corresponding to the backsides of the substrate-side terminals (claim 1). Also, none of the prior art discloses or suggests a liquid crystal device comprising a plurality of terminals formed on a target object, a plurality of terminals formed on a first side of a substrate opposite the terminals formed on the target object, an adhesive material disposed between the target object and the substrate, a plurality of external terminals formed on the first side of the substrate, and a plurality of compensation members formed on the second side of the substrate and aligned with a remainder of the plurality of terminals formed on the first side of the substrate (claim 8).

Claims 1, 2, 4 and 5 are allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Muramatsu discloses a LCD comprising a compression-bond-connection substrate connected to a LC panel.

Any inquiry concerning this communication should be directed to Tai Duong at telephone number 703 308-4873.

TVD/12/02

TVD

KENNETH PARKER
PRIMARY EXAMINER